

Amendments to the Claims

The following listing of claims replaces all prior versions and listings of claims in the present application:

1. (Currently Amended) A wind power generation device comprising:

a substantially cylindrical duct;

an impeller having a plurality of blades protruding outward, said impeller being ~~and~~ rotatable around a duct axis; and

a nacelle that constitutes a streamlined pencil body together with said ~~the~~ impeller and houses a generator that uses torque of said ~~the~~ impeller,

wherein said ~~characterized in that a~~ duct has a side wall with a wing-shaped cross section, said side wall having no holes therein, (wing section) so as to be able to produce a reduced pressure area at a rear of said ~~the~~ duct and prevent generation of swirl at the rear of said ~~the~~ duct,

wherein said ~~the~~ pencil body is provided such ~~so~~ that a ~~tip~~ forward end thereof is ~~placed in the~~ disposed inside of said duct and a rear end thereof protrudes outwardly from a rear end of said ~~the~~ duct, so as to be close to a tip of the reduced pressure area produced at the rear of said ~~the~~ duct, and

wherein blades of said ~~the~~ impeller are provided in a maximum wind speed area in said ~~the~~ duct.

2. (Currently Amended) The wind power generation device according to claim 1, ~~{characterized in that}~~ wherein a chord of ~~{the wing section}~~ said wing-shaped cross section of said {the} side wall of said {the} duct is inclined at a predetermined angle to the duct axis, and wherein a protruding length of the rear end of said {the} pencil body from the rear of said {the} duct is adjusted according to a position of the tip of said {the} reduced pressure area, which {that} changes depending on said {the} predetermined angle.

3. (Currently Amended) The wind power generation device according to claim 2, ~~{characterized in that the}~~ wherein said predetermined angle is 2° to 12°, and the protruding length of said {the} pencil body from the rear of said {the} duct is ~~{set-~~ to} 0.1 to 0.4 times ~~{the duct}~~ a length of said duct.

4. (Currently Amended) The wind power generation device according to claim 1, ~~{characterized in that the}~~ wherein said blades of said {the} impeller are provided within a range of 0.07 times ~~{the duct}~~ a length of said duct in a forward direction, and 0.18 times the ~~{duct}~~ length of said duct in a rearward direction, with respect to a minimum inner diameter portion of said {the} duct.

5. (Currently Amended) The wind power generation device according to claim 2, ~~{characterized in that the}~~ wherein said blades of said {the} impeller are provided within a range of 0.07

times ~~{the duct}~~ a length of said duct in a forward direction, and 0.18 times the ~~{duct}~~ length of said duct in a rearward direction, with respect to a minimum inner diameter portion of said ~~{the}~~ duct.

6. (Currently Amended) The wind power generation device according to claim 3, ~~{characterized in that the}~~ wherein said blades of said ~~{the}~~ impeller are provided within a range of 0.07 times the ~~{duct}~~ length of said duct in a forward direction, and 0.18 times the ~~{duct}~~ length of said duct in a rearward direction, with respect to a minimum inner diameter portion of said ~~{the}~~ duct.

7. (New) The wind power generation device according to claim 2, wherein said predetermined angle is inclined at a positive angle such that a leading edge of said chord at the front end of said duct is separated a greater distance from said duct axis than a trailing edge of said chord at the rear end of said duct.